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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/611,364	07/06/2000	Tetsuya Abe	P19357	6388

7055 7590 06/04/2003

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RESTON, VA 20191

EXAMINER

SENFİ, BEHROOZ M

ART UNIT	PAPER NUMBER
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2613

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DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/611,364

Applicant(s)

ABE ET AL.

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Drawings***

1. The corrected or substitute drawings were received on March 17, 2003 and acknowledged by the Examiner.

### ***Response to Amendment***

2. Applicant's arguments paper no. 6, filed March 17, 2003 have been fully considered but are moot in view of the new ground(s) of rejection.

Applicant's Amendment (paper no. 6) amended claims 1, 3, 5, 6, 8 and 9.

3. Claim 8, is rejected under 35 U.S.C. 102(b) as being anticipated by Sorimachi et al. (US 4,818,858) for the same reason as set forth in previous Office Action (Paper no. 4, dated Oct. 16, 2002).

Response to remarks:

Applicant asserts (Paper no. 6, page 7, lines 13+) that Sorimachi '858 do not disclose "a camera, but rather a visual sensor system that may be used".

In response, Examiner respectfully disagrees, because figs. 3a – 3b of Sorimachi clearly shows cameras 1 and 2, with lenses and CCD's, which are similar to applicants cameras 21 and 22 of fig. 2.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claims 6, 13 - 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicant fails to explicitly explain the passive measuring.

Where is the left side of fields angle?

Where in the figures is the center of the left half?

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramoto et al (US 6,507,359) in view of Sorimachi et al. (US 4,818,858).

Regarding claims 1, 8, 9, and 11 - 12, Muramoto '359 discloses the claimed "stereo camera comprising" (Muramoto: fig. 2), and the claimed "a pair of photographing optical system that produces a corresponding pair of photographing areas, and are located in a common plane ..... " (Muramoto: figs. 4, and 9), and the claimed "an object distance measuring device that measures a distance to an object" (Muramoto: figs. 9, and 14, col. 13, lines 1+), and the claimed "a convergence angle adjustment ..... " (Muramoto: fig. 3, 5 and 6, shows that the convergence angle is adjustable, abstract, col. 7, lines 44+) and the claimed "controller that controls convergence angle adjustment ..... " reads on (Muramoto: figs. 5, and 9, abstract).

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Muramoto '359 discloses controller as discussed above to control the convergence angle in accordance with the object distance. But fails to explicitly teach in details the angle adjustment mechanism that varies an angle.

However, the above claimed limitation is well-known in the prior art as evidenced by Sorimachi '858, in particular (Sorimachi: fig. 2) clearly shows the adjustment mechanism.

In view of the above, it would have been obvious to one having ordinary skill in the art to modify the system of Muramoto, as taught by Sorimachi, for the benefit of adjusting convergence angle at a high speed with a high accuracy (Sorimachi: col. 1, lines 36 – 39).

Regarding claim 2, Sorimachi '858 discloses the claimed “pair of photographing Optical systems are each .....” (reads on figs. 2 and 3a-b), and the claimed “drive mechanism which rotates each .....” (reads on col. 4, lines 2+).

Regarding claim 3, Sorimachi '858 discloses the claimed “pair of rotary plates whose .....” (reads on fig. 2, col. 5, lines 8+), and the claimed “sector gears provided on each of pair .....” and also “a sector worm wheel .....” and “a worm which is in mesh .....” (reads on fig. 2, col. 4, lines 19+).

Regarding claim 2, combination of Muramoto '359 and Sorimachi '858 teaches the claimed “pair of photographing Optical systems are each .....” reads on (Muramoto: fig. 5, and Sorimachi: figs. 2 and 3a-b), and the claimed “drive mechanism which rotates each .....” reads on (Muramoto: col. 8, lines 5+, and Sorimachi: col. 4, lines 2+).

Regarding claim 3, combination of Muramoto '359 and Sorimachi '858 teaches the claimed “pair of rotary plates having respective center axes of rotation in parallel with each other, pair of rotary plates supporting pair of photographing optical system and having inter-

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meshing sector gears” and the claimed “a sector worm wheel .....” and “a worm which is in mesh .....” reads on (Sorimachi: fig. 2, plates 8 and 9, col. 2, lines 52+, and col. 4, lines 19+ and Muramoto: fig. 19, col. 17, lines 32+).

Regarding claim 4, combination of Muramoto ‘359 and Sorimachi ‘858 teaches the claimed “light path of .....” (Sorimachi: figs. 3a - 3b, elements 24 and 34).

Regarding claim 5, combination of Muramoto ‘359 and Sorimachi ‘858 teaches the claimed “drive mechanism which moves at least a part of .....” (Sorimachi: col. 4, lines 25+).

Regarding claim 6, combination of Muramoto ‘359 and Sorimachi ‘858 teaches the claimed “pair of photographing optical systems comprises an image pickup device that performs a passive measurement of an object distance, such that a measurement point of the image pickup device is located on a closed side of a field angle of the corresponding photographing optical system, with respect to a median line of the field angle” reads on (Muramoto: figs. 5, 6 and 9, and Sorimachi: figs. 2 and 3a - 3b), also combination of Muramoto and Sorimachi teaches the stereoscopic system as discussed above, that can control and adjust the convergence angle to detect and calculate the distance to an object, therefore the limitation passive measurement as best understood is inherent and necessitated in the system.

Regarding claim 7, the limitation claimed “stereo camera applied to an electronic still camera” is inherent in combination system of Muramoto ‘359 and Sorimachi ‘858.

Regarding claims 10, 13 – 14, as best understood the combination system of Muramoto ‘359 and Sorimachi ‘858 are capable of passive and active measurement, and also (Muramoto: fig. 9) shows controller that controls the focusing of pair of photographing optical systems based on the object distance.

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*Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**

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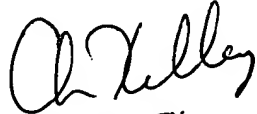
**(703) 872-9314**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B., Jr.

5/31/2003

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
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